

=&gt; d ibib abs ind l19 1-1

L19 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2005 ACS on STN  
ACCESSION NUMBER: 2004:753279 HCAPLUS  
DOCUMENT NUMBER: 141:242144  
TITLE: L-amino acids manufacture with bacteria from  
**glucose** and pentose mixtures  
INVENTOR(S): Savrasova, Ekaterina Alekseevna;  
Sycheva, Elena Viktorovna; Michrina, Tatyana  
Anatorievna; Kozliv, Yuri Ivanovich  
PATENT ASSIGNEE(S): Ajinomoto Co., Inc., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 16 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004254694	A2	20040916	JP 2004-51056	20040226
BR 2004000577	A	20041207	BR 2004-577	20040220
US 2004229321	A1	20041118	US 2004-784980	20040225

PRIORITY APPLN. INFO.: RU 2003-105269 A 20030226

AB The L-amino acids are manufactured from low-cost pentose mixts. obtained from cellulosic biomass as substituted for a portion of **glucose**. The pentose mixts. contain mainly arabinose and xylose. The L-amino acids are selected from L-isoleucine, L-threonine, L-tryptophan, and L-histidine. Manufacture of L-tryptophan with Escherichia coli from **glucose** and pentoses (arabinose and xylose) was shown. The production of L-tryptophan is comparable to that uses **glucose** as the sole C source.

IC ICM C12P013-04  
ICS C12P013-06; C12P013-08; C12P013-22; C12P013-24

CC 16-2 (Fermentation and Bioindustrial Chemistry)

ST cellulosic biomass amino acid manuf Escherichia; **glucose**  
substitute amino acid manuf Escherichia

IT Carbon sources, microbial  
Escherichia coli  
Eubacteria  
Fermentation  
(L-amino acids manufacture with Escherichia coli from **glucose** and pentose mixts.)

IT Amino acids, preparation  
RL: BPN (Biosynthetic preparation); BIOL (Biological study); PREP (Preparation)  
(L-amino acids manufacture with Escherichia coli from **glucose** and pentose mixts.)

IT Pentoses  
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
(L-amino acids manufacture with Escherichia coli from **glucose** and pentose mixts.)

IT Gene, microbial  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(amino acid-synthesizing; L-amino acids manufacture with Escherichia coli from **glucose** and pentose mixts.)

IT Biomass  
Solid wastes  
(cellulosic; L-amino acids manufacture with Escherichia coli from **glucose** and pentose mixts.)

- IT 71-00-1P, L-Histidine, preparation 72-19-5P, L-Threonine, preparation  
73-22-3P, L-Tryptophan, preparation 73-32-5P, L-Isoleucine, preparation  
RL: BPN (Biosynthetic preparation); BIOL (Biological study); PREP  
(Preparation)  
(L-amino acids manufacture with Escherichia coli from **glucose** and  
pentose mixts.)
- IT 9004-34-6, Cellulose, biological studies  
RL: BSU (Biological study, unclassified); RCT (Reactant); BIOL (Biological  
study); RACT (Reactant or reagent)  
(L-amino acids manufacture with Escherichia coli from **glucose** and  
pentose mixts.)
- IT 50-99-7, D-**Glucose**, biological studies 58-86-6, D-Xylose,  
biological studies 5328-37-0, L-Arabinose  
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES  
(Uses)  
(L-amino acids manufacture with Escherichia coli from **glucose** and  
pentose mixts.)